LSI DOCKET NO. 01-379

CLAIMS:

What is claimed is:

1. An apparatus comprising:

one of a semiconductor and an integrated circuit;

a visible circuit component, associated with the one of a semiconductor and an integrated circuit, and having an appearance, wherein in response to a finding that the apparatus is faulty, the visible circuit component changes its appearance.

2. The apparatus of claim 1, wherein the one of a semiconductor and an integrated circuit is a semiconductor.

3. The apparatus of claim 1, wherein the one of a semiconductor and an integrated circuit is an integrated circuit.

4. The apparatus of claim 1, wherein the visible circuit component's changing its appearance includes burning out the visible circuit component.

5. The apparatus of claim 1, wherein the visible circuit component includes an active circuit component.

6. The apparatus of claim 1, wherein the active circuit element is a transistor.

7. The apparatus of claim 6, wherein the transistor is one of a field-effect transistor and a bipolar transistor.

8. The apparatus of claim 1, wherein the visible circuit component includes a passive circuit component.

9. The apparatus of claim 8, wherein the passive circuit component is a fuse.

10. The apparatus of claim 8, wherein the passive circuit component is one of a resistor, a diode, a capacitor, and an inductor.

11. The apparatus of claim 1, further comprising:

a test circuit,

wherein the test circuit determines if the apparatus is faulty.

12. The apparatus of claim 11, wherein the test circuit generates a test pattern and the apparatus operates in response to the test pattern.

13. The apparatus of claim 12, wherein the test circuit monitors a result of the apparatus's operating in response to the test pattern and compares the result to a signature.

14. The apparatus of claim 13, wherein the test circuit calculates the signature as a function of the test pattern.

15. The apparatus of claim 15, further comprising:

a triggering circuit,

wherein the triggering circuit causes the visible circuit component to change its appearance in response to the test circuit determining that the apparatus is faulty.

16. A wafer for testing by a testing device, the wafer comprising:

a plurality of similar circuit components, wherein each of the circuit components includes testing circuitry, wherein in response to the testing device, the testing circuitry tests the circuit components concurrently.

17. The wafer of claim 16, wherein each of the circuit components includes a visible subcomponent having an appearance and wherein the visible subcomponent changes its appearance in response to the testing circuitry finding the circuit component faulty.

18. The wafer of claim 16, further comprising:

at least one interface point, wherein the testing device activates the testing circuitry through the at least one interface point.

19. The wafer of claim 18, further comprising:

a network of signal paths, wherein the network of signal paths connect the at least one interface point with the circuit components.

20. The wafer of claim 19, wherein the signal paths include a power supply signal path.

21. The wafer of claim 19, wherein the signal paths include a clock signal path.

22. The wafer of claim 19, wherein the signal paths include a control signal path.

23. The wafer of claim 19, wherein at least one of the signal paths is located on a scroll line.

24. The wafer of claim 19, wherein at least one of the signal paths is located on a die.

25. An electronic device testing system comprising means for:

initiating a first self-test of a first electronic device;

detecting a failure of the first self-test;

responsive to detecting the failure, making a visible component on the first electronic device change its appearance.

26. The system of claim 25, wherein making the visible component change appearance includes burning out the visible component.

27. The system of claim 25, comprising additional means for:

initiating a second self-test of a second electronic device, wherein the second self-test and the first self-test execute in parallel.

28. The system of claim 25, wherein the first electronic device is an integrated circuit.

29. A computer program product in a computer readable medium, comprising instructions for:

initiating a first self-test of an first electronic device;

detecting a failure of the first self-test;

responsive to detecting the failure, making a visible component on the first electronic device change its appearance.

30. The computer program product of claim 29, wherein making the visible component change appearance includes burning out the visible component.

31. The computer program product of claim 29, comprising additional instructions for:

initiating a second self-test of a second electronic device, wherein the second self-test and the first self-test execute in parallel.

32. The computer program product of claim 29, wherein the first electronic device is an integrated circuit.

33. A method of testing a circuit, comprising:

applying at least one signal to testing circuitry;

in response to a determination that the circuit is defective, modifying a visible circuit component in the circuit to have a different appearance.

34. The method of claim 33, wherein modifying the visible circuit component includes destroying the visible circuit component.

35. The method of claim 33, wherein modifying the visible circuit component includes causing the visible circuit component to overheat.

36. The method of claim 33, wherein the testing circuitry is built into the circuit.